

REMARKS

Applicants have carefully reviewed the Final Office Action mailed on August 14, 2006. Applicants respectfully traverse all objections, rejections, and assertions made by the Examiner. With this amendment, the specification (which is amended to correct a typographical error) as well as claims 3-4 and 8-9 are amended. No new matter is added. Claims 1-12 and 21-22 remain pending.

Claim rejections under 35 U.S.C. §102

Claims 1-12 and 21-22 are rejected under 35 U.S.C. §102(b) as being anticipated by Rasmussen in EP 0720838. Regarding claims 1, 2, and 6, claim 1 recites in part:

winding a coil over the polymer jacket, wherein the coil is wound under tension; and

heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final medical device that has desirable flexibility characteristics.

The Examiner indicated that the “pulling” recited in column 8, lines 30-35 meets the claimed winding under tension and that UV irradiation recited in column 8, line 46 through column 9, line 5 “is effective to relieve tension ...”. We respectfully disagree.

Rasmussen, at column 8, lines 30-35, describes altering the pitch of wirecoil 8 so that it can be opened or enlarged. Changing the pitch of a coil is not the same as winding a coil onto a jacket under tension. This alone distinguishes the claimed invention from Rasmussen.

If, however, the Examiner persists on interpreting the art in this manner, then the Examiner must also find a teaching in the art that demonstrates the relief of this tension in order to meet all of the claim limitations. One can readily appreciate that if a coil is “tensioned” in a longitudinal direction so that it has an open pitch, relieving this “tension” must include allowing the pitch to reduce to its “non-tensioned” state. This would mean that the pitch of the coil would reduce and that the overall length of the coil would, consequently, reduce. Rasmussen lacks any teaching whatsoever that the coil’s pitch is reduced or make any suggestion that it could be reduced in length. Therefore, Rasmussen does not teach or suggest all the limitations of claim 1. Based on these remarks, Applicants respectfully submit that claim 1 is in condition for

allowance. Because claims 2 and 6 depend from claim 1, they are also allowable based on this amendment and because they add significant elements to distinguish them further from the art.

Regarding claim 3, claim 3 recites that the coil includes a fluorocarbon material. The Examiner indicated that Rasmussen discloses a coil with a fluorocarbon material at column 8, lines 6-16 (referring to “fluorescing PTFE”) and at column 9, lines 1-5 along with column 10, lines 27-41 (referring to “fluorescing Dymax”). The Examiner appears to have mischaracterized the art. For example, column 8, lines 6-16 indicate that the body segment 5 (not the wirecoil 8) may be coated with PTFE. Similarly, the other cited text indicates that bonding layer 25 may include a UV-curable adhesive or that the wirecoil 8 may include platinum. These passages are silent as to any fluorocarbon material being associated with the wirecoil 8. Indeed, nothing in Rasmussen teaches or suggests a coil that includes a fluorocarbon material. Instead, Rasmussen only discloses that the wirecoil 8 is stainless steel (column 8, lines 27-30) or platinum (column 10, lines 36-41). Based on this distinction, Applicants respectfully submit that claim 3 is patentable over Rasmussen. Please note that claim 3 is amended into independent form and is considered to be in condition for allowance.

Regarding claims 4-5, claim 4 similarly recites that the coil include an outer coating. As described above, Rasmussen does not teach or suggest this limitation and, instead, only teaches a stainless steel or platinum wirecoil 8. For this reason, Applicants respectfully submit that claim 4 is patentable over Rasmussen. Please note that claim 4 is amended into independent form and is considered to be in condition for allowance. Claim 5, which depends from claim 4, additionally recites that the outer coating includes a fluorocarbon material. This feature is also not taught or disclosed by Rasmussen. For these reasons and because claim 5 depends from claim 4, Applicants respectfully submit that claim 5 is also in condition for allowance.

Regarding claims 7 and 10-12, claim 7 recites the step of embedding the coil within the jacket so that the outer surface of the jacket wicks between adjacent windings of the coil. As previously argued (See Applicants reply filed May 26, 2006), Rasmussen only appears to teach or suggest that the bonding layer can have a U-shaped course to promote the easy threading in and out of the embolization coil. This does not equate with the claimed embedding and wicking as suggested by the Examiner.

Furthermore, Applicants specification describes the contemplated embedding and wicking, for example, at page 2, line 16 through page 3, line 7. In addition, this embedding may occur “without melding together” the coil and the jacket. See: Applicants’ specification at page 4, lines 7-8. This clearly differs from Rasmussen where a bonding layer 25 is used to fix the turns of the wirecoil 8 to the elongated member 13. See: Rasmussen at column 8, lines 39-53 et seq. Based on these differences, Applicants respectfully submit that Rasmussen does not teach or suggest all the limitations of claim 7 or of claims 10-12 depending therefrom.

Regarding claims 8-9, claim 8, which is amended into independent form, recites winding a coil under tension about the jacket. Claim 9, which is also amended into independent form, further recites relieving the tension within the coil. For the reasons set forth above, Applicants respectfully submit that Rasmussen does not teach or suggest these limitations. Accordingly, Applicants respectfully submit that claims 8-9 are in condition for allowance.

Regarding claims 21 and 22, both claims 21 and 22 recite that the coil includes a fluorocarbon material. As set forth above, nothing in Rasmussen teaches or suggests a coil that includes a fluorocarbon material. Based on this distinction, Applicants respectfully submit that claims 21 and 22 are patentable over Rasmussen.

Claims 1-12 and 21-22 are rejected under 35 U.S.C. §102(b) as being anticipated by Burnham in U.S. Patent No. 4,764,324. Regarding claims 1-6, independent claims 1, 3, and 4 all recite:

heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final medical device that has desirable flexibility characteristics.

Thus, the wicked surface of the jacket provides an outer surface in the final medical device that has desirable flexibility characteristics. Any semblance of a wicked surface in Burnham is completely eliminated in the final Burnham catheter. Because of this, Burnham cannot anticipate each and every claim limitation. Based on these remarks, Applicants respectfully submit that claim, 1, 3, and 4 are in condition for allowance. Because claims 2 and 5-6 depend from claim 1, they are also allowable based on these remarks and because they add significant elements to distinguish them further from the art.

Regarding claims 7-12, independent claims 7, 8, and 9 all recite embedding the coil within the jacket. Embedding, as described in the specification at page 2, line 16 through page 3, line 7, is clearly different from submerging a coil in a jacket, as disclosed by Burnham. Thus, the claimed embedding distinguishes claims 7-9, as well as those claims depending therefrom from Burnham.

Regarding claims 21 and 22, each of these claims recites that the coil includes a fluorocarbon material. The Examiner indicated that a radiopaque dye disclosed at column 1, lines 45-64 meets this limitation. The Examiner seems to have mischaracterized the art. A radiopaque dye that aids in fluoroscopy (which is a process that is based on fluorescence) is not that same as a fluorine-containing compound like the claimed "fluorocarbon" material. Thus, this limitation distinguishes claims 21 and 22 from Burnham.

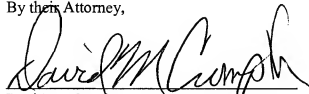
Conclusion

Reexamination and reconsideration are requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is also respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,



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Date: 10/12/06